

REMARKS

Claims 2-6 are pending in the present application (“Application”). By the present amendment, claims 2-4 are amended, claims 5 and 6 are canceled and new claims 7-20 are added. The Applicant respectfully requests reconsideration of the application in view of these amendments and the following remarks.

I. THE CLAIMS ARE PATENTABLE OVER THE CITED PRIOR ART

A. Paragraph 3 Rejection of Claims 2-6

Claims 2-6 stand rejected under 35 U.S.C. 102(b) as being assertedly anticipated by Ainsworth et al., U.S. Patent No. 6,299,774 (“Ainsworth Patent”). Claims 5 and 6 have been canceled thereby rendering their rejection moot. The Applicants respectfully traverse this rejection with respect to claims 2-4.

1. Claim 2

Claim 2 as amended recites a process for digesting materials. The process comprises providing a reaction container having a medium disposed therein and receiving a stream of materials to be treated into the reaction container. The stream of materials includes organic waste material and microbes capable of digesting at least a portion of the organic material. The process further comprises holding the materials in the reaction container for a time interval sufficient to allow the microbes to digest at least a portion of the organic material in a bacterial growth phase. The process also comprises draining liquid from the reaction container to allow at least a portion of the microbes and undigested organic material to dry within the reaction container. Finally, the process comprises receiving an additional stream of materials to be treated into the reaction chamber. The additional stream of materials includes additional organic waste material and microbes.

2. The Ainsworth Patent

The Ainsworth Patent is directed to a system and process for anaerobic digestion of organic waste material and production of useful materials such as methane. Ainsworth Patent, Abstract, col. 2, lines 23-24 and col. 3, lines 55-65. In the disclosed process, a feedstock slurry is introduced into an anaerobic digester having microbes disposed therein.

Ainsworth Patent, col. 43-57. Preferred microbes include those adapted for converting cellulose-containing feedstock into methane. *Id.* Methane gas production efficiency is said to be enhanced through the use of elevated pressure in the digester. Ainsworth Patent, col. 8, lines 42-54.

The Ainsworth Patent discloses that certain conditions inside the digester may be controlled including solids content, reaction solution composition, temperature, gas content, digestion rate, anaerobic microbe content, agitation, feed and effluent rates, gas production rate, carbon/nitrogen ratio of the feedstock, pressure, pH, and retention time in the digester. Ainsworth Patent, col. 5, lines 31-37. The feed rate may also be varied. Ainsworth Patent, col. 5, lines 56-58. Ainsworth notes that a fluid recirculator may be used to recirculate feedstock slurry, scum sludge, supernatant or reaction effluent through the reaction vessel. Ainsworth Patent, col. 7, lines 56-67.

The Ainsworth Patent discloses that the sludge from the anaerobic digester is sent to a collection tank or a dryer to form dried sludge that can be used as landfill, a food supplement, artificial peat moss, charcoal briquettes, fuel or other similar purpose. Ainsworth Patent, col. 9, lines 39-42. Solid briquettes can be formed from the sludge by a) removing the sludge from the digester; b) optionally filtering the sludge in conventional solids filtration equipment to remove the excess fluid from the sludge to form a water-reduced sludge; c) forming the briquettes by pressure molding the water-reduced sludge; and d) optionally drying the briquettes in conventional drying equipment. Ainsworth Patent, col. 9, lines 52-62.

The supernatant or effluent from the anaerobic reactor may be treated and fed back into the anaerobic digester where it is used to digest additional feedstock. Ainsworth Patent, col. 9, lines 43-48.

3 The Ainsworth Patent Does Not Teach, Disclose or Suggest the Features of Claim 2

The Applicant respectfully submits that the Ainsworth Patent does not disclose the features of claim 2. In particular, the Ainsworth Patent does not disclose a process in which liquid is drained from a reaction container to allow microbes and undigested organic material to dry within the reaction container. Moreover, the Ainsworth Patent does not disclose

receiving additional materials into the reaction chamber with the microbes and undigested organic material that have been allowed to dry.

The Ainsworth Patent discloses the drying of sludge that has been removed from the digester. The dried sludge can then be used as fuel. There is no suggestion that the dried sludge material could be re-introduced into the digester or otherwise further processed.

The Applicant respectfully submits that the Ainsworth Patent does not disclose or suggest a process in which waste materials are introduced into a reaction chamber having disposed therein microbes and undigested organic material that have been allowed to dry.

For at least the above reasons, the Applicant submits that the features of claim 2 are not disclosed or suggested in the Ainsworth Patent. The Applicant therefore submits that the rejection of claim 2 and dependent claims 3 and 4 under 35 U.S.C. 102(b) should be withdrawn.

B. Paragraph 4 Rejection of Claims 5 and 6

Claims 5 and 6 stand rejected under 35 U.S.C. 102(b) as being assertedly anticipated by Hojsgaard, U.S. Patent No. 6,325,935 ("Hojsgaard Patent"). Claims 5 and 6 have been canceled thereby rendering their rejection moot.

II. NEW CLAIMS

Claims 7-20 are added by the present amendment. These claims are directed to a method according to the invention in which waste materials are processed in a treatment system comprising a plurality of reactor tanks. The Applicant believes no new matter is brought into the Application by the addition of these claims.

Support for the features of claims 7-20 may be found in the specification at page 4, line 1 through page 5, line 7.

III. CONCLUSION

For at least the reasons set forth above, the Applicant respectfully submit that claims 2-4 and new claims 7-20 are in condition for allowance. The Applicant therefore requests that the present application be allowed and passed to issue.

Should the Examiner believe anything further is desirable in order to place the

application in even better condition for allowance, the Examiner is invited to contact the Applicant's undersigned representative.

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